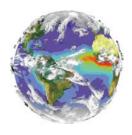


# **Proposals...a Cost Perspective**

Claude Freaner
Science Mission Directorate
NASA Headquarters
2005



## Why Worry About Cost?



NASA needs to be able to make independent assessments of the Cost Risk and the Cost Realism of each project to lessen the chance of mission failure. Some consequences of inadequate assessments are:

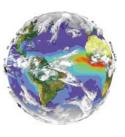
- Cancellation
- De-scope of Instrumentation
- Loss of spacecraft/instrument
- Loss of resolution
- Reduced operational period

The earlier the independent assessment is made, the more taxpayer dollars may be saved.





### First Step for a Prospective PI:



### **READ THE NRA/AO/RFP, COVER TO COVER!!!**

Read the Technical, Management, Cost, Education & Public Outreach, and Proposal Submittal sections with as much attention to detail as you place on the Science Section

The biggest risk to the PI at this stage is that the proposal will not be selected. Some suggestions to prevent rejection:

- -Provide ALL requested data
  - •Look for"show", "list", "provide", "explain", "describe", etc.
  - Make liberal use of a highlighter
  - Create a compliance matrix, include it with the proposal
- Get a good Project Manager and Systems Engineer right away they're experts in what needs to be done
- -Pay attention to proposal submittal instructions



### What is a "Basis Of Estimate"?



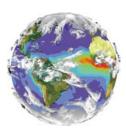
# Basis Of Estimate: How you determined what the cost will be.

- –Catalog price
- -Vendor quote
- -http://www.policyworks.gov/org/main/mt/homepage/mtt/perdiem/travel.shtml
- -Vendor ROM (or NTE) quote
- -Detailed breakdown of time and materials to build it
- -Similar to one built on another program last year (analogy)
- -"Engineering judgement" (SWAG)

### **Every cost in the proposal should have a Basis of Estimate!**



### **Budget and Funding Profile**



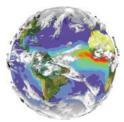
## Read the AO Preface, carefully

- -\$425M FY06\$ cost cap
- -Phase A studies \$1.2M over 7 months
- -Less than 25% spent prior to Mission Confirmation
- -No mandatory 36 month development

Funding Profile: AO Section 5.11.6 lists a funding profile; this is maximum available in any year and subject to change.



#### **CADRe**



Cost Analysis Data Requirement NASA has recently established a Cost Analysis Data Requirement (CADRe) that will be applicable to investigations selected through this AO. The CADRe Data Requirements Document (DRD) combines the key elements of the Cost Analysis Requirements Description DRD, the Life Cycle Cost Estimate DRD, and Cost Data Report DRD into a single, coordinated report. The CADRe itself will not be considered as part of the evaluation, but proposers will be required to identify the estimated costs of CADRe data collection in the proposal. More detailed instructions for CADRe are included in NPR 7120.5C; an example may be provided with the Guidelines for Concept Study Reports. "

- •What is it? ---> Cost Analysis Data Requirement a formalized collection of cost and technical data at specified key milestones.
- Required by NPR 7120.5C
- •Who funds it? ---> Since the AO wording was created, things have changed. NASA HQ/PA&E is now paying support contractors to do the work so as to minimize impact on the projects. Projects must fund only their own efforts to collect existing documentation and transmit it to the support contractor.
- •CADRe templates are changing. The Agency is in the middle of implementing the CADRe and things will change. You can always find the most current info at

https://secureworkgroups.grc.nasa.gov/casg